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South Access to the Golden Gate Bridge

DOYLE DRIVE

Citizens' Guide to the Draft Environmental Impact Statement/Report | December 2005

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TABLE OF CONTENTS

INTRODUCTION 1
WHAT IS THE PURPOSE OF THIS GUIDE?

PROJECT PARTNERS 2
WHAT AGENCIES ARE PRIMARILY RESPONSIBLE FOR THE ENVIRONMENTAL DOCUMENT?

PROJECT OVERVIEW 3
WHAT IS THE DOYLE DRIVE PROJECT AND WHY ARE IMPROVEMENTS NEEDED?

PROJECT HISTORY 4
WHAT IS THE HISTORY OF DOYLE DRIVE AND THE PROJECT?

THE ALTERNATIVES 5-9
WHAT ALTERNATIVES ARE CONSIDERED IN THE ENVIRONMENTAL DOCUMENT AND HOW DO THEY COMPARE?

SUMMARY OF ALTERNATIVE IMPACTS AND MITIGATION MEASURES 10-33
HOW WILL THE ALTERNATIVES AFFECT THE ENVIRONMENT? ARE THERE WAYS TO MINIMIZE THE IMPACTS?

COST AND FUNDING 34
HOW MUCH WILL THE PROJECT COST AND HAS FUNDING BEEN IDENTIFIED?

PUBLIC AND AGENCY COORDINATION 35
WHAT PUBLIC INVOLVEMENT AND AGENCY COORDINATION HAS OCCURRED?

ENVIRONMENTAL DOCUMENT AVAILABILITY 36
HOW CAN INTERESTED CITIZENS GET A COPY OF THE DRAFT ENVIRONMENTAL DOCUMENT?

HOW TO SUBMIT COMMENTS 36
HOW CAN THE PUBLIC PROVIDE COMMENTS ON THE DRAFT ENVIRONMENTAL DOCUMENT?

NEXT STEPS 37
WHAT HAPPENS AFTER THE DRAFT ENVIRONMENTAL DOCUMENT IS CIRCULATED FOR PUBLIC REVIEW?

PROJECT SCHEDULE 37
WHAT IS THE EXPECTED PROJECT SCHEDULE FOR THE ENVIRONMENTAL PROCESS, DESIGN AND CONSTRUCTION?

PURPOSE OF THE CITIZENS' GUIDE

This guide is intended to be an overview of the proposed Doyle Drive Project, the alternatives being considered, and key environmental considerations that would result from the construction and long-term operation of the project. While this guide summarizes the Draft Environmental Impact Statement/Report (DEIS/R), it is not intended to be a part of the formal DEIS/R.

Readers who want detailed and complete information on the environmental analysis for the Doyle Drive Project should read the DEIS/R. Public comments must address the contents of the DEIS/R and not the contents of this guide. See the Environmental Document Availability Section of this guide for the DEIS/R availability.

INTRODUCTION

A Draft Environmental Impact Statement/Report (DEIS/R)/Draft Section 4(f) Evaluation for the South Access to the Golden Gate Bridge: Doyle Drive Project has been prepared.

Federal and state laws require review and analysis of projects that may affect the environment. The DEIS/R document describes the project alternatives, existing environmental setting, impacts from construction and operation, and avoidance, minimization and mitigation measures to reduce or eliminate impacts.

Information contained in the DEIS/R enables decision-makers, interested parties, and the public to evaluate the various alternatives and options.

PROJECT PARTNERS

A number of agencies are participating in the environmental process.

Federal Lead Agency

A NEPA environmental document is required for most federal actions. The action can include funding a project, building a project on federal land, or issuing a federal permit.

- The Federal Highway Administration (FHWA) is the lead NEPA agency, and it has the responsibility for ensuring compliance with federal environmental laws and regulations.

NEPA Cooperating Agencies

Upon request of the lead agency, any other Federal agency having jurisdiction within the project area, or having special expertise with respect to any environmental issue, may be a cooperating agency.

- The Presidio Trust, the United States Department of the Interior, National Park Service (NPS) - Golden Gate National Recreation Area and the Department of Veteran Affairs are the NEPA cooperating agencies.

State Lead Agency

CEQA requires that an agency take responsibility for complying with state environmental regulations.

- The San Francisco County Transportation Authority (the Authority) is the lead CEQA agency and has the responsibility for complying with state environmental regulations.

CEQA Responsible Agencies

Under CEQA, a Responsible Agency reviews the environmental document and is responsible for considering the environmental effects of the project.

- Caltrans and the Golden Gate Bridge, Highway and Transportation District are the CEQA Responsible Agencies.
- Caltrans is the owner and operator of Doyle Drive and is responsible for NEPA oversight on behalf of FHWA.

PROJECT OVERVIEW

PROJECT PURPOSE

Improve the seismic, structural, and traffic safety of Doyle Drive within the setting and context of the Presidio of San Francisco and its purpose as a National Park.

Doyle Drive, the southern approach to the Golden Gate Bridge, is the primary highway and transit linkage through San Francisco, between counties to the south (San Mateo and Santa Clara) and to the north (Marin and Sonoma). Currently over 91,000 vehicles use Doyle Drive every weekday. Weekend traffic volumes are comparable to the weekday volumes, confirming that it serves as both a primary commute and a recreational route.

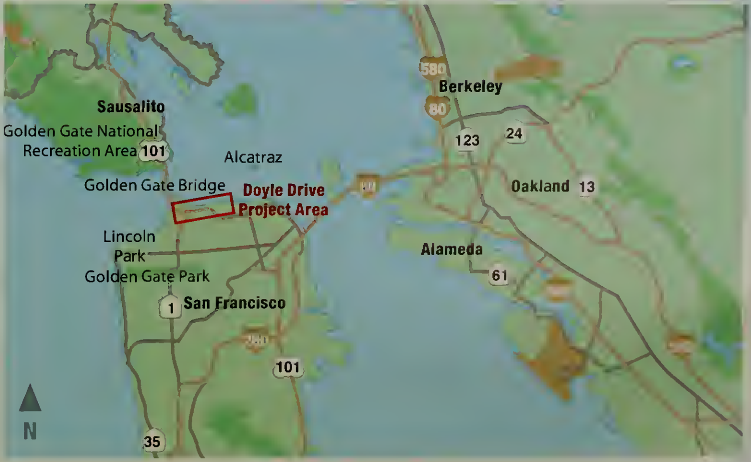
Originally built in 1936, Doyle Drive is approaching the end of its useful life. It requires extensive seismic, structural, and traffic safety upgrades.

Should an earthquake or structural failure force the closure of Doyle Drive for any significant length of time, freeways in the north and East Bay areas would experience staggering congestion from rerouted trips, and the regional transit and ferry systems would be greatly overburdened. Severe economic hardship and job relocation would likely result for the North Bay Counties as well as for San Francisco.

In the short-term, regular maintenance, seismic retrofit, and rehabilitation activities are keeping the structure safe. However, in the long-term, permanent improvements are needed to bring Doyle Drive up to current design and safety standards.

To address the degradation of the roadway, the San Francisco County Transportation Authority (the Authority), the Federal Highway Administration (FHWA), and the California Department of Transportation (Caltrans) have prepared a joint federal and state Draft Environmental Impact Statement/Report (DEIS/R) to evaluate design alternatives for replacing Doyle Drive.

DOYLE DRIVE DEFICIENCY	RESULTING CONDITION
STRUCTURAL DEGRADATION • Age of the facility (over 70 years) • Effects of heavy traffic • Exposure to salt air	• Does not meet current seismic and structural safety standards
LOCATION • Eastern portion is located in a potential liquefaction zone which could result in the loss of strength in soil during an earthquake	• Potential for structural failure during an earthquake
DESIGN • Does not meet today's safety standards (road has small lane widths, no shoulders, no median to separate traffic and tight curves)	• Contributes to the high level of congestion and increased likelihood of serious accidents
ACCESS • Lack of direct vehicular access into the Presidio	• No access to facilities within the Presidio



PROJECT HISTORY

To understand the proposed alternatives and the context for the Doyle Drive planning process, it is helpful to review the history of Doyle Drive. Here are milestones for Doyle Drive and the planning process.

MILESTONES FOR DOYLE DRIVE

1933	• Construction began; road designed and built with 3 ten-foot lanes in each direction
1936	• Doyle Drive opened; named after Frank P. Doyle: director of the CA State Automobile Association, a roadway advocate and civic leader, and the first private citizen to cross the Golden Gate Bridge
1945	• Designated a state highway
1955	• Golden Gate Bridge Highway District requested that the State widen and reconstruct Doyle Drive to handle congestion
1962	• Proposal for an eight-lane divided roadway not pursued due to public objection • Presidio became a National Historic Landmark District (NHLD) with Doyle Drive as a contributing structure
1970	• After a fatal accident, the National Transportation Safety Board (NTSB) recommended that Doyle Drive be upgraded to current freeway design standards
1973	• Draft EIS completed for reconstruction of Doyle Drive as an eight-lane highway with a fixed median barrier; public objected to the proposal
1974	• Marks Bill passed by state legislature; prohibited Caltrans from widening Doyle Drive to more than 6 lanes without approval of the San Francisco Board of Supervisors
1985	• San Francisco Board of Supervisors recommended that Caltrans develop alternatives that would improve safety but not increase the number of vehicles • Caltrans responded with 2 alternative recommendations, a six- and eight-lane roadway design. The issues for each alternative were never resolved and a preferred solution was not identified
1991	• Caltrans requested the Board of Supervisors to revisit the Doyle Drive design concepts • Supervisors responded with establishment of Doyle Drive Task Force (representatives from various local governments and public and private organizations)
1993	• Task force issued the Report of the Doyle Drive Task Force, which proposed a scenic parkway • In principle, the Board of Supervisors unanimously approved Task Force recommendations • Caltrans completed project study report with the Task Force's recommended concepts included
1994	• National Park Service published the Final General Management Plan Amendment (GMPA) which identified five objectives for Doyle Drive • The Authority initiated Doyle Drive Intermodal Study, "to further the development and ultimate implementation of a realistic and fundable replacement for Doyle Drive."
1996	• Intermodal Study results support the Doyle Drive Task Force and GMPA recommendations that multi-modal and direct vehicular access, in and out of the Presidio, would be the central features of the replacement design. The study recommended that the Doyle Drive replacement design incorporate key principles of a scenic parkway including lower design speed and sensitivity to historic surroundings
2000	• The Authority, FHWA and Caltrans begin preparation of the present DEIS/R

THE ALTERNATIVES

The alternatives development process utilized an approach known as Context Sensitive Solutions that was responsive to community members, resource agencies and local staff. One of the initial steps in the Doyle Drive project was to assess the character of the project area and to understand the needs of the surrounding community. The project Alternatives have been developed to address the unique setting, needs of the community and previous planning efforts.

Three alternatives are considered in the DEIS/R for the Doyle Drive Project: *Alternative 1: No-Build, Alternative 2: Replace and Widen* and *Alternative 5: Presidio Parkway.*

This section provides detailed information about *Alternative 2: Replace and Widen* and *Alternative 5: Presidio Parkway.* For detailed information about *Alternative 1: No-Build,* please review the DEIS/R.

ALTERNATIVE 1: NO-BUILD ALTERNATIVE

This alternative consists of retaining the existing Doyle Drive with no major improvements to the project area beyond what is already programmed by the year 2020. It provides the baseline for existing environmental conditions and future travel conditions against which all other alternatives are compared.

FEATURE HIGHLIGHTS

- Retains current roadway configuration
- No improvements in seismic, structural, and traffic safety of the roadway.

NUMBER OF LANES

- 6 lanes (three 10-foot lanes in each direction)
- No southbound auxiliary lane
- No fixed median barrier

SHOULDERS

- No shoulders

ALTERNATIVE 2: REPLACE AND WIDEN ALTERNATIVE

This alternative would replace the existing high-viaduct and low-viaduct with new structures that meet the most current seismic, structural design and safety standards. The new facility would be built on the existing alignment and would include an auxiliary lane in the southbound direction from the Park Presidio interchange to the Richardson Avenue ramp.

FEATURE HIGHLIGHTS

- New high-viaduct and low-viaduct
- Entry and exit ramp improvements to improve traffic safety.
- Median barrier

NUMBER OF LANES

- 6 lanes (three 12-foot lanes in each direction; with lane width reduction to 11-foot in some areas)
- 1 southbound auxiliary lane (12-foot)

SHOULDERS

- Continuous 10-foot shoulder on inside and outside lanes in both directions

ALTERNATIVE 5: PRESIDIO PARKWAY ALTERNATIVE

This alternative would replace the existing facility with a new six-lane facility and a southbound auxiliary lane, between the Park Presidio interchange and the new Presidio accesses at Girard Road. It combines a high-viaduct with two short cut-and-cover tunnels and an open depressed roadway with a wide, heavily landscaped median.

FEATURE HIGHLIGHTS

- New high-viaduct
- 2 new short cut-and-cover tunnels
- New open depressed roadway
- Reconfigured Park Presidio Interchange
- New direct access to the Presidio
- Option for new additional Merchant Road connection
- Improved pedestrian access and new connections between the Main Post and Crissy Field
- Improved views from within the Presidio

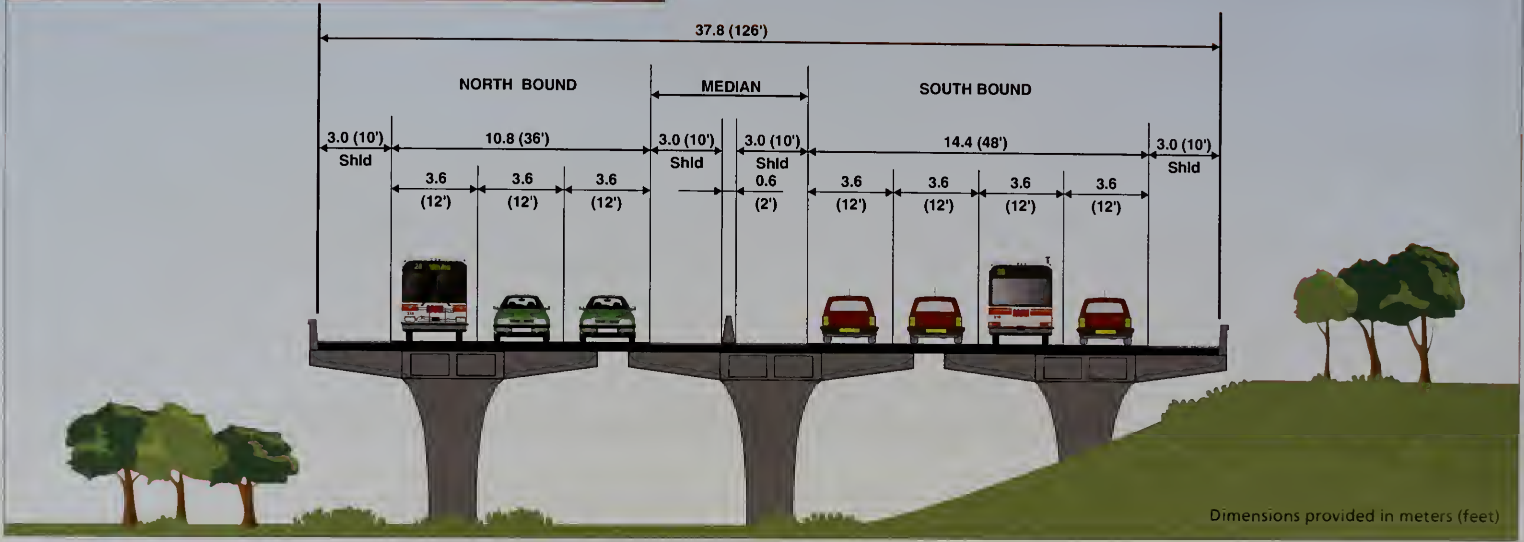
NUMBER OF LANES

- 6 lanes (two 11-foot lanes and one 12 foot outside lane in each direction)
- 1 southbound auxiliary lane (11-foot) between Park Presidio Interchange and the new Presidio access at Girard Road
- Wide landscaped median (width ranges from 16-41 feet)

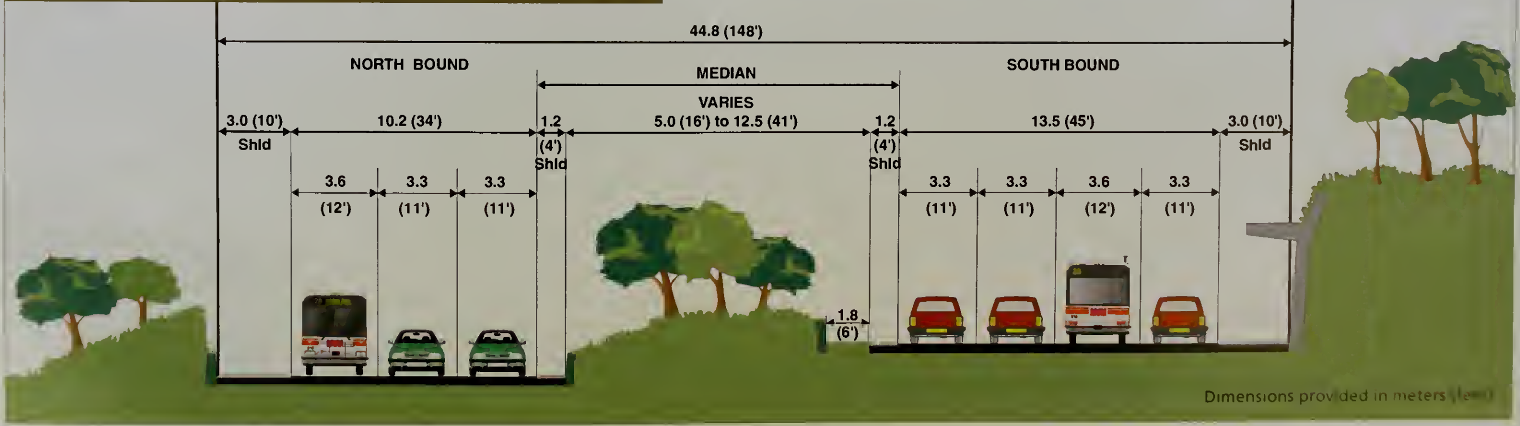
SHOULDERS

- 10-foot outside shoulders in both directions
- 4-foot inside shoulder in both directions

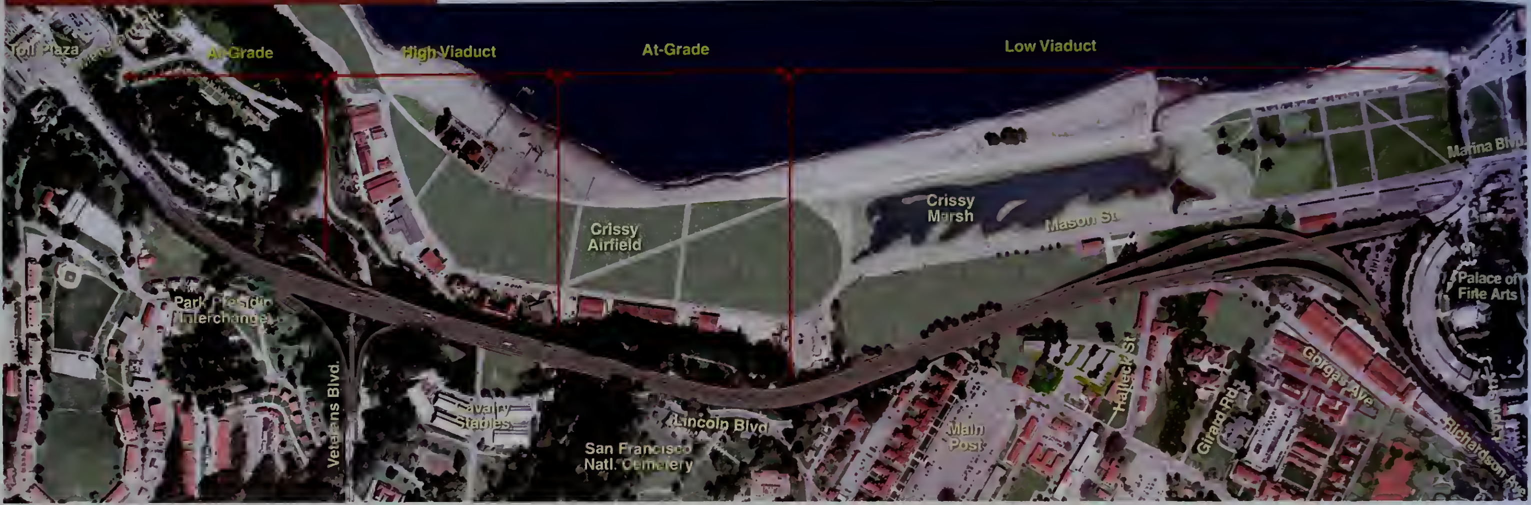
Cross-Section Alternative 2 — Replace & Widen



Cross-Section Alternative 5 — Presidio Parkway



Alternative 2 — Replace & Widen



Access to Merchant Road at the Golden Gate Bridge Toll Plaza: The existing access remains

Park Presidio Interchange: The existing ramps would be reconfigured to accommodate the new facility

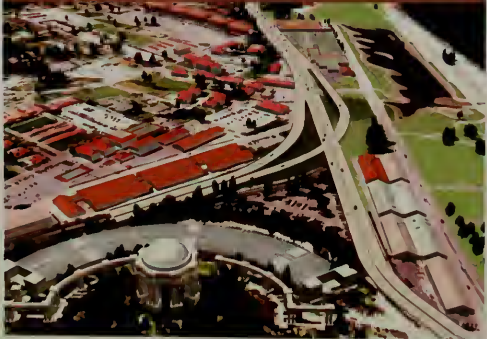
Presidio Access: Presidio access provided for southbound traffic via a right turn from Richardson Avenue to Gorgas Avenue. No access for northbound traffic

CONSTRUCTION STAGING OPTIONS

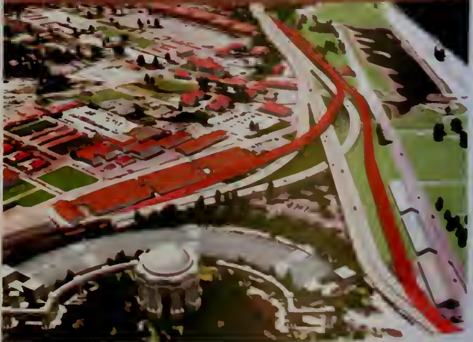
1) No Detour Option: Would not need a detour during construction because the widened portion of the new roadway would be built around the existing low-viaduct. As new facility is widened, traffic would shift to new facility.

2) Detour Option: A temporary detour road would be constructed to maintain traffic through the construction period.

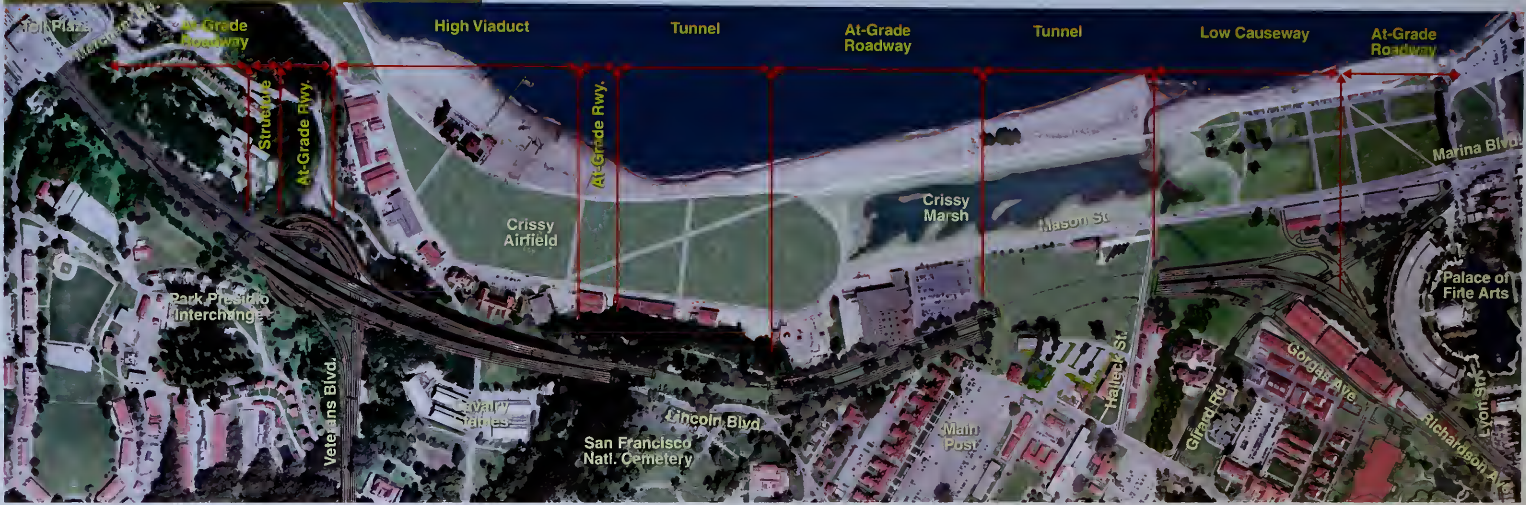
1) No Detour Option



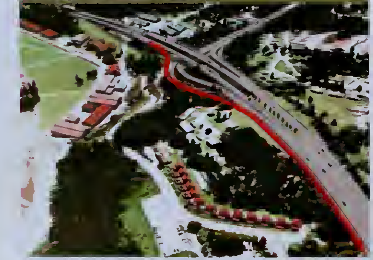
2) Detour Option



Alternative 5 — Presidio Parkway

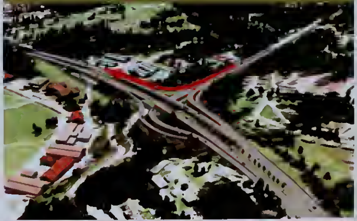


Merchant Road Slip Ramp Option

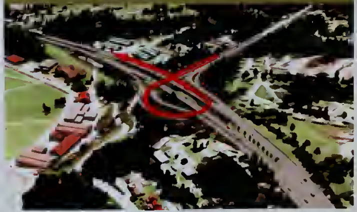


Presidio Access at the Toll Plaza: This option would provide a new direct connection from westbound Doyle Drive to Merchant Road and improve access to the Golden Gate Visitors' Center

Hook Ramp Option

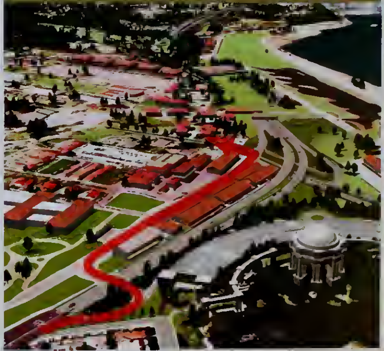


Loop Ramp Option

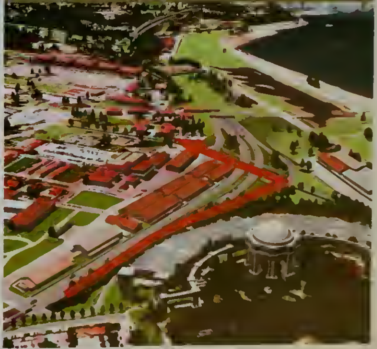


Park Presidio Interchange: Two design options to improve the connection from northbound Veterans Boulevard to eastbound Doyle Drive

Circle Drive Option



Diamond Interchange Option



Presidio and Marina Boulevard Access: Two design options to provide new access to the Presidio and maintain access to Marina Boulevard

KEY MILESTONES: DEVELOPMENT OF PROJECT ALTERNATIVES

March 2000

Authority conducted four formal scoping meetings to gather input and comments from the public, agencies and elected officials to develop alternatives.

2000-2002

Project team identified a full range of feasible alternatives and conducted preliminary engineering and initial environmental studies.

June 2002

Completed preliminary environmental analysis and identified four primary project alternatives and two design options: Alternative 1: No-Build; Alternative 2: Replace and Widen; Alternatives 3a and 3b: Long Tunnels; and Alternatives 4a and 4b: Short Tunnels.

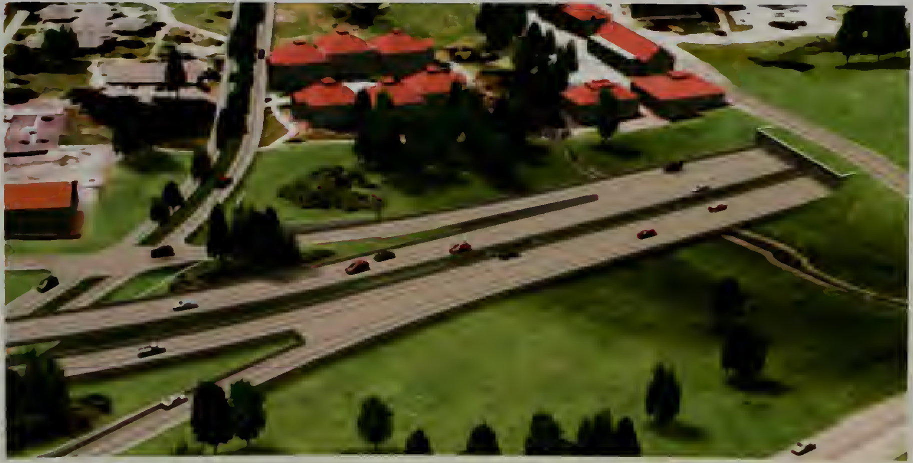
January 2003

A fifth alternative, the Presidio Parkway, was added to the preliminary environmental analysis. In comparison to the tunnel alternatives it was determined that Alternative 5: the Presidio Parkway, would provide all the benefits and functions of the single-tunnel Alternatives 3a, 3b, 4a, and 4b with less cost, construction duration and environmental impact.

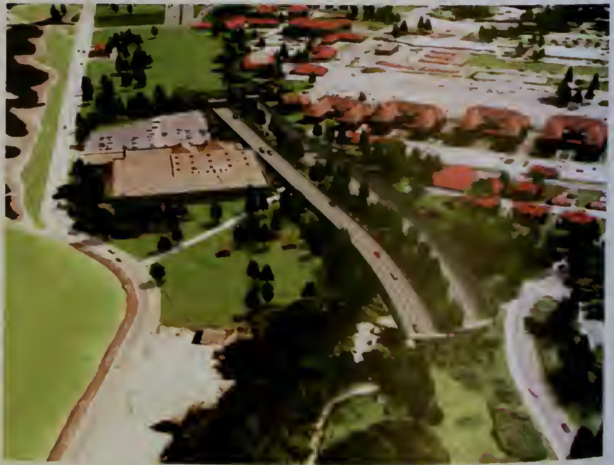
February 2004

Eliminated the four single-tunnel alternatives from further consideration and analysis in the DEIS/R. The action was supported by the Agency Coordination Committee and the Doyle Drive Citizens' Advisory Subcommittee.

VISUAL SIMULATIONS OF ALTERNATIVE 5: PRESIDIO PARKWAY ALTERNATIVE



Halleck Street tunnel portal and the Girard Road undercrossing



Two short tunnel sections

SUMMARY OF ALTERNATIVE IMPACTS AND MITIGATION MEASURES

The Draft Environmental Impact Statement/Environmental Impact Report (DEIS/R) presents the environmental existing conditions, impacts from construction and operation of the alternatives, and suggested avoidance, minimization and/or mitigation measures to reduce or eliminate impacts.

This summary provides an overview the impacts and mitigation measures identified in the DEIS/R for *Alternative 2: Replace and Widen* and *Alternative 5: Presidio Parkway.* The information is grouped by environmental impact category and a summary is provided of impacts and mitigation measures to reduce project impacts. The Authority would apply the mitigation measures during design, construction, and operation of the facility. For information on the *Alternative 1: No Build*, please review the DEIS/R.

Overall, each alternative would cause temporary impacts due to short-term construction activities and permanent impacts from operation of the alternative. Most of these impacts can be effectively mitigated and many of the impacts would be addressed through design requirements and best management practices that are required by current standards and guidelines or are already part of established construction procedures.

ENVIRONMENTAL IMPACT CATEGORIES

Human Environment

- Land Use and Planning
- Parks and Recreation
- Growth
- Community Impacts
- Parking
- Relocation
- Environmental Justice
- Traffic and Transportation
- Transit
- Visual and Aesthetics
- Cultural Resources

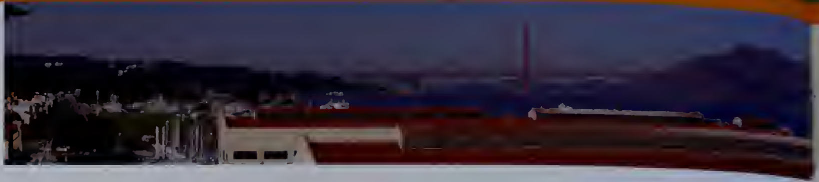
Physical Environment

- Hydrology, Water Quality and Storm water
- Geology/Soils/Seismic/Topography
- Hazardous Materials and Waste
- Air Quality
- Noise and Vibration
- Energy

Biological Environment

- Natural Communities
- Wetlands and other Waters of the U.S.
- Plant Species
- Animal Species
- Invasive Species

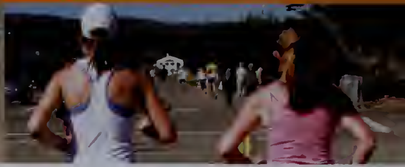
Cumulative Effects



LAND USE AND PLANNING

The land use and planning analysis identifies existing regional and local land use and development plans and policies that apply to the study area. It describes changes that would occur as a result of the alternatives, evaluates the consistency of alternatives with local and regional planning policies, and discusses their effects on community cohesion. More specifically, the evaluation considers if the alternatives physically divide an established community, reduce the usability of the land, or disrupt businesses for extended periods.

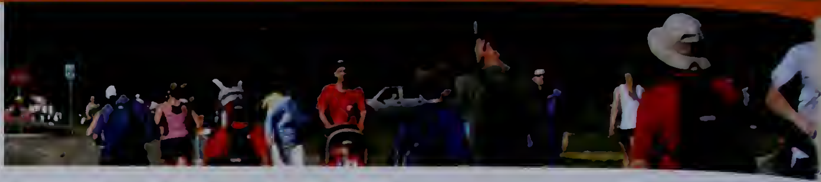
ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • Construction staging would require the use of the parking lot of the Post Exchange and Commissary and the temporary use of the parking lot between Buildings 230 and 1063 in the Presidio. • The Detour Option would require the temporary removal of 4 Mason Street warehouses. **PERMANENT IMPACTS** • The alternative would be consistent with local and regional plans and policies including the Presidio Trails and Bikeways Master Plan and Environmental Assessment and the San Francisco Bay Plan. (beneficial effect) • The alternative would be inconsistent with some local and regional plans and policies including: 2002 Presidio Trust Management Plan, the 1994 General Management Plan Amendment Environmental Impact Statement, the Doyle Drive Task Force Report, Letterman Center Environmental Impact Statement, Presidio of San Francisco Vegetation Management Plan and Environmental Assessment and the San Francisco General Plan. **NO DETOUR OPTION** (specific to option) • Would require the conversion of 2.2 acres of land for right-of-way. • Would require the permanent removal of 1 building in the Letterman planning area. **DETOUR OPTION** (specific to option) • Would require the conversion of 1.5 acres of land for right-of-way. • Would require the permanent removal of 4 buildings in the Crissy Field planning area.	• Coordination with the Presidio Trust regarding location and duration of construction work in the Presidio will be carried out whenever feasible. • Building removal that is in conflict with the Presidio Trust development plans will require an amendment to the plan prior to implementation of the project.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • Within the Crissy Field planning area, construction staging would require the removal of the parking area and Post Exchange buildings. • Within the Letterman Planning area, construction staging would require the temporary use of the parking lot between Buildings 230 and 1063 in the Presidio. • Building 106 in the Presidio would be temporarily vacated during the construction period. **PERMANENT IMPACTS** • The alternative reduces the area for possible Crissy Marsh expansion. • The alternative would be consistent with local and regional plans and policies including the 1994 General Management Plan Amendment Environmental Impact Statement, the Doyle Drive Task Force Report, Letterman Center Environmental Impact Statement, the Presidio Trails and Bikeways Master Plan and Environmental Assessment, and the San Francisco Bay Plan. (beneficial effect) • The alternative would be inconsistent with some local and regional plans and policies including: 2002 Presidio Trust Management Plan, Presidio of San Francisco Vegetation Management Plan and Environmental Assessment and the San Francisco General Plan. **DIAMOND OPTION** (specific to option) • Would require the conversion of 10.1 to 11.4 acres of land for right-of-way. • Would require the permanent removal of 9 buildings in the Presidio (Buildings 201, 204, 205, 230, 231, 605, 606, 670 and 1158). **CIRCLE DRIVE OPTION** (specific to option) • Would require the conversion of 9.6 to 11.1 acres of land for right-of-way. • Would require the permanent removal of 10 buildings in the Presidio. (Buildings 201, 204, 205, 230, 231, 605, 606, 670, 1151 and 1158). **MERCHANT ROAD SLIP RAMP OPTION** (specific to option) • Would require an additional 1.2 acres of land. • Would require the removal of an additional building on Armistead Road	• Coordination with the Presidio Trust regarding location and duration of construction work in the Presidio will be carried out whenever feasible. • Building removal that is in conflict with the Presidio Trust development plans will require an amendment to the plan prior to implementation of the project.



PARKS AND RECREATION

The parks and recreation analysis describes potential impacts and benefits to park and recreational facilities in the vicinity of the alternatives. Impacts can be physical in nature or can be related to the users' enjoyment of the facility.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • Construction activities would require the periodic closure of various roadways including portions of McDowell Avenue, Crissy Field Avenue, Lincoln Boulevard, Halleck Street, and Marshall Street. **PERMANENT IMPACTS** **NO DETOUR OPTION** (specific to option) • Would result in the loss of 2.2 acres of parkland. **DETOUR OPTION** (specific to option) • Would result in the loss of 1.5 acres of parkland.	• Coordination with the Presidio Trust regarding location and duration of construction work in affected park and recreational facilities will be done whenever feasible. • The public will be informed of recreational impacts during the construction process.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • Construction activities would require the periodic closure of various roadways including portions of McDowell Avenue, Crissy Field Avenue, Lincoln Boulevard, and Marshall Street. • Construction activities would require that Halleck Street be closed for most of the construction period. **PERMANENT IMPACTS** • A total of 4.4 acres of land area located over the tunnel segments would be made available as parkland. (beneficial effect) **DIAMOND OPTION** (specific to option) • Would result in the loss of 11.4 acres of parkland. **CIRCLE DRIVE OPTION** (specific to option) • Would result in the loss of 11.1 acres of parkland. • Would require the removal of the YMCA swimming pool. **MERCHANT ROAD SLIP RAMP OPTION** (specific to option) • Would result in the loss of 1.2 acres of parkland in addition to the area required for either Parkway option.	• Coordination with the Presidio Trust regarding location and duration of construction work in affected park and recreational facilities will be done whenever feasible. • The public will be informed of recreational impacts during the construction process.



GROWTH

The growth analysis examines the relationship between the project and growth within the study area. The potential impacts and benefits related to growth resulting from the new project are identified within the context of the community.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • No impacts. There would be no temporary growth inducement related to construction. **PERMANENT IMPACTS** • The alternative may limit planned growth since the alternative does not provide direct access to the Presidio as was assumed in the Presidio Trust Management Plan.	• None required.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • No impacts. There would be no temporary growth inducement related to construction. **PERMANENT IMPACTS** • The alternative is compatible with planned growth. The alternative would provide improved access to the Presidio which would facilitate the development plans of the Presidio Trust. (beneficial effect)	• None required.

COMMUNITY IMPACTS

The community impacts assessment reviews various characteristics and resources as they relate to the community, such as population growth, safety, emergency vehicle access and access to community facilities.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • The visitor experience to the Presidio may be degraded by the sights and sounds of construction. • Emergency access and response time may be affected due to temporary road closures during construction. • Construction would require the temporary relocation of some employees. **NO DETOUR OPTION** (specific to option) • Construction would result in an unmet demand of 473 additional parking spaces in the Gorgas Warehouses, Thornburg and Palace of Fine Arts area. • Construction would require a fairly large workforce, approximately 154 workers per year. **DETOUR OPTION** (specific to option) • Construction would result in an unmet demand of 156 additional parking spaces in the Gorgas Warehouses area. • Construction would require a fairly large workforce, approximately 173 workers per year. **PERMANENT IMPACTS** • Roadway improvements associated with this alternative would provide some limited improvement in emergency access. (beneficial effect) • The transmission line serving the Golden Gate Bridge would be affected and require relocation. **NO DETOUR OPTION** (specific to option) • Would result in a need for 1 additional parking space in the Mason Street Warehouses area. • Would result in the permanent displacement of 5 employees. **DETOUR OPTION** (specific to option) • Would result in an unmet demand of 20 additional parking spaces in the Thornburgh area. • Would result in the permanent displacement of 36 employees.	• Construction detour plans will be developed in coordination with local emergency service providers and will be addressed in the Transportation Management Plan. • All displacement and relocation activities will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended by the Civil Rights Act of 1964. • The parking study will be updated periodically to determine the location and extent of the available parking during construction. • Replacement parking will be established for the permanent loss of parking spaces. Parking deficits may be managed within the available supply by the Presidio Trust.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • The visitor experience to the Presidio may be degraded by the sights and sounds of construction. • Construction would result in an unmet demand of 768 additional parking spaces in the PX/Commissary, Gorgas Warehouses, Thornburgh, Rod Road and Palace of Fine Arts area. • Construction would require a fairly large workforce, approximately 196 workers per year. • Emergency access and response may be affected due to temporary road closures during construction. **PERMANENT IMPACTS** • Roadway configuration and improvements associated with this alternative would provide improved access for emergency vehicles. (beneficial effect) • The alternative would result in an unmet demand of 118 parking spaces in the Thornburg, North Halleck, and Rod Road areas. • The transmission line serving the Golden Gate Bridge would be affected and require relocation. **DIAMOND OPTION** (specific to option) • Would result in the permanent displacement of 48 employees. **CIRCLE DRIVE OPTION** (specific to option) • Would result in the permanent displacement of 68 employees.	• Construction detour plans will be developed in coordination with local emergency service providers and will be addressed in the Transportation Management Plan. • An emergency response plan will be developed and coordinated with the various agencies to deal with emergencies in the tunnels of the alternative. • All displacement and relocation activities will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended by the Civil Rights Act of 1964. • The parking study will be updated periodically to determine the location and extent of the available parking during construction. • Replacement parking will be established for the permanent loss of parking spaces. Parking deficits may be managed within the available supply by the Presidio Trust. Parking lost in the Thornburg area could be replaced by expanding the proposed underground parking garage. Planning for the garage is still at the conceptual level.

PARKING

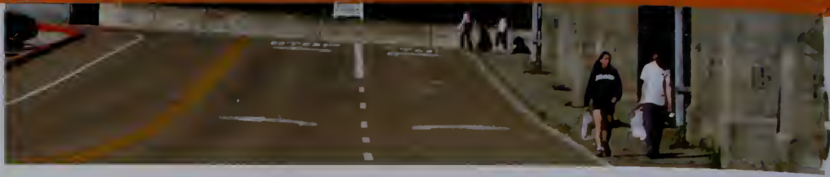
The parking analysis examines existing and future conditions of the study area and quantifies the long-term impacts of the alternatives on parking. It also describes the regulatory setting and methodology for determining parking supply and demand.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) **NO DETOUR OPTION** (specific to option) • Construction would result in an unmet demand of 473 additional parking spaces in the Gorgas Warehouses, Thornburg and Palace of Fine Arts area. **DETOUR OPTION** (specific to option) • Construction would result in an unmet demand of 156 additional parking spaces in the Gorgas Warehouses area. **PERMANENT IMPACTS** **NO DETOUR OPTION** (specific to option) • Would result in an unmet demand of 1 additional parking space in the Mason Street Warehouses area. **DETOUR OPTION** (specific to option) • Would result in an unmet demand of 20 additional parking spaces in the Thornburgh area.	• The parking study will be updated periodically to determine the location and extent of the available parking during construction. • Replacement parking will be established for the permanent loss of parking spaces. Parking deficits may be managed within the available supply by the Presidio Trust.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • Construction would result in an unmet demand of 768 additional parking spaces in the PX/Commissary, Gorgas Warehouses, Thornburgh, Rod Road and Palace of Fine Arts area. **PERMANENT IMPACTS** • The alternative would result in an unmet demand of 118 parking spaces in the Thornburg, North Halleck, and Rod Road areas.	• The parking study will be updated periodically to determine the location and extent of the available parking during construction. • Replacement parking will be established for the permanent loss of parking spaces. Parking deficits may be managed within the available supply by the Presidio Trust. Parking lost in the Thornburg area could be replaced by expanding the proposed underground parking garage. Planning for the garage is still at the conceptual level.

RELOCATION

The relocation analysis provides an assessment of the buildings in the study area that will be removed as a result of the alternatives.

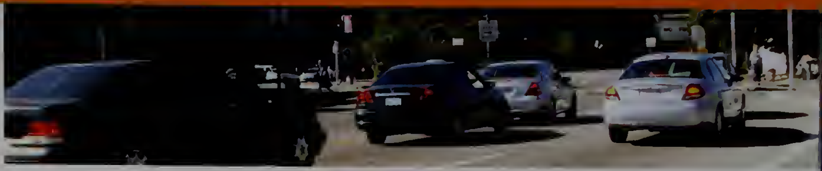
ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • The Detour Option would require the temporary removal of 4 Mason Street warehouses. **PERMANENT IMPACTS** **NO DETOUR OPTION** (specific to option) • Would require the permanent removal of 1 building in the Letterman planning area. **DETOUR OPTION** (specific to option) • Would require the permanent removal of 4 buildings in the Crissy Field planning area.	• All displacement and relocation activities will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended by the Civil Rights Act of 1964. Relocation assistance will be provided to affected homeowners, renters, and tenant businesses. Property owners will be compensated in accordance with the above act and other applicable law.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • No impacts. The alternative would not require the temporary removal of any buildings. **PERMANENT IMPACTS** **DIAMOND OPTION** (specific to option) • Would require the permanent removal of 9 buildings in the Presidio. (Buildings 201, 204, 205, 230, 231, 605, 606, 670 and 1158). **CIRCLE DRIVE OPTION** (specific to option) • Would require the permanent removal of 10 buildings in the Presidio. (Buildings 201, 204, 205, 230, 231, 605, 606, 670, 1151 and 1158). **MERCHANT ROAD SLIP RAMP OPTION** (specific to option) • Would require the removal of an additional 4 buildings on Armistead Road.	• All displacement and relocation activities will be conducted in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended by the Civil Rights Act of 1964. Relocation assistance will be provided to affected homeowners, renters, and tenant businesses. Property owners will be compensated in accordance with the above act and other applicable law.



ENVIRONMENTAL JUSTICE

The environmental justice analysis complies with a Federal Executive Order to identify and address disproportionately high adverse human health or environmental effects on minority and low-income populations resulting from federal programs, policies and activities.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • No impacts. There would be no disproportionate adverse effects on minority or low-income populations due to construction. **PERMANENT IMPACTS** • No impacts. There would be no disproportionate adverse effects on minority or low-income populations.	• None required.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • No impacts. There would be no disproportionate adverse effects on minority or low-income populations due to construction. **PERMANENT IMPACTS** • No impacts. There would be no disproportionate adverse effects on minority or low-income populations.	• None required.



TRAFFIC AND TRANSPORTATION

The traffic and transportation analysis examines existing and future conditions of the study area and quantifies the long-term transportation impacts of the alternatives. It includes potential impacts on travel patterns and the transportation environment. It also describes existing and projected auto traffic, circulation, parking, and pedestrian/bicycle conditions in the area.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • Temporary impacts would result from construction vehicles, area-wide traffic reduction and ramp/road closures (greater than one-month). **PERMANENT IMPACTS** • Roadway intersections, highway segments and weaving areas would have the same level of congestion as the forecasts show for the roadway under the No-Build conditions. • The existing adjacent sidewalk along the north side of Doyle Drive would be removed.	• A Transportation Management Plan will be developed to address movement of construction equipment, construction vehicle routes, construction signage, and general area-wide traffic reduction and management during construction. • New pedestrian and bicycle trails are in place or planned on both sides of Doyle Drive to accommodate users in place of the removed sidewalk along Doyle Drive.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • During construction temporary impacts would result from construction vehicles, area-wide traffic reduction and ramp/road closures (greater than one-month). **PERMANENT IMPACTS** • Roadway intersections, highway segments and weaving areas would have the same level of congestion as the forecasts show for the roadway under the No-Build conditions. • The existing adjacent sidewalk along the north side of Doyle Drive would be removed. **MERCHANT ROAD SLIP RAMP OPTION** (specific to option) • Would eliminate the weave condition on northbound US 101 between the Park Presidio on-ramp and the Merchant Road exit-ramp.	• A Transportation Management Plan will be developed to address movement of construction equipment, construction vehicle routes, construction signage, and general area-wide traffic reduction and management during construction. • New pedestrian and bicycle trails are in place or planned on both sides of Doyle Drive to accommodate users in place of the removed sidewalk along Doyle Drive.

TRANSIT

The transit analysis examines existing and future transit systems serving the study area and quantifies the impacts of the alternatives on transit ridership, travel time, and level of service.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • Some transit routes may require temporary re-routing to accommodate construction activities. **PERMANENT IMPACTS** • No impacts are anticipated on overall transit ridership volume, transit routing, transit travel times or level of service.	• The general public will be given sufficient notice of temporary transit rerouting if it is required due to construction.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • Some transit routes may require temporary re-routing to accommodate construction activities. **PERMANENT IMPACTS** • No impacts are anticipated on overall transit ridership volume, transit routing, transit travel times or level of service. • Some transit routes may stop on Richardson Avenue at Lyon Street to create a more centralized location for transit connections. This connection could accommodate timed transfers and improve connections between local transit service and Presidio Shuttle service. (beneficial effect)	• The general public will be given sufficient notice of temporary transit rerouting if it is required due to construction.

VISUAL AND AESTHETICS

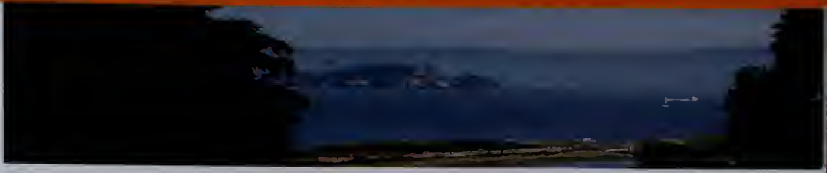
The visual and aesthetics analysis assesses the visual impacts of the alternatives. The analysis looks at potential visual quality, prominent features, and scenic resources from representative viewpoints in the study area. In addition, viewpoints where the alternatives could affect existing visual quality are identified and evaluated.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • The removal of existing landscaping and vegetation during construction would result in an adverse visual impact. • At times, residents living near the construction site may experience increased light and glare from temporary lighting sources used for nighttime construction. **PERMANENT IMPACTS** **NO DETOUR OPTION** (specific to option) • The raising of the low-viaduct structure approximately six feet would result in a negative visual effect (increased view blockage and visual dominance) primarily when viewed from the Main Post and Crissy Field areas. **DETOUR OPTION** (specific to option) • Would have minimal long-term visual impacts which involve only modest changes to the existing facility.	• After construction, all temporarily affected areas will be restored to their appropriate native vegetation in natural areas, or appropriate ornamental vegetation type in landscaped areas. Design guidelines for restoration will be developed in conjunction with the Presidio Trust, the National Park Service, Caltrans, and the State Office of Historic Preservation and the appropriate design guideline plans and standards. • Lighting for nighttime construction activities will be directed into the immediate area under construction to reduce disturbance.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • The removal of existing landscaping and vegetation during construction would result in an adverse visual impact. • At times, residents living near the construction site may experience increased light and glare from temporary lighting sources used for nighttime construction. **PERMANENT IMPACTS** • Portions of the facility would be in a tunnel and removed from the existing landscape. Visual connections between areas of the Presidio would be restored with the removal of the low-viaduct and visual quality would improve in some areas. (beneficial effect) **MERCHANT ROAD SLIP RAMP OPTION** (specific to option) • Would require the removal of a row of trees along the north side of Doyle Drive, as well as the removal of a row of apartment buildings along Armistead Road.	• After construction, all temporarily affected areas will be restored to their appropriate native vegetation in natural areas, or appropriate ornamental vegetation type in landscaped areas. Design guidelines for restoration will be developed in conjunction with the Presidio Trust, the National Park Service, Caltrans, and the State Office of Historic Preservation and the appropriate design guideline plans and standards. • Lighting for nighttime construction activities will be directed into the immediate area under construction to reduce disturbance.

CULTURAL RESOURCES

The cultural resources analysis reports on archaeological and historic resources in the vicinity of the alternatives, along with governing federal, state, and local regulations.

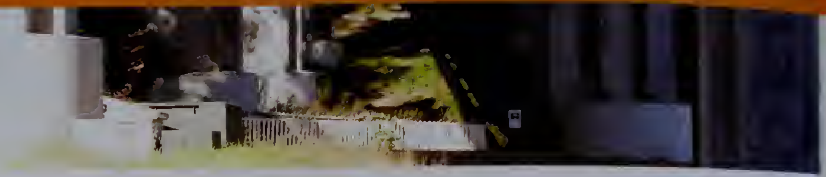
ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • No temporary impacts have been identified. **PERMANENT IMPACTS** • There would be a direct adverse effect to the Presidio National Historic Landmark District (NHLD) by altering the alignment of some contributing roads, and by the removal of existing cultural landscape features. • The removal and replacement of the Doyle Drive viaducts with new structures would adversely affect the structures as historic properties. • There would be a direct adverse effect to the Golden Gate Bridge property from the removal of Doyle Drive, which is a contributing element of the bridge property. **DETOUR OPTION** (specific to option) • Would have a direct adverse affect from the removal of four of the seven Mason Street Warehouses.	• The required agreements and plans will be developed for the cultural resources after consultation with the State Historic Properties Office, The Presidio Trust, the National Park Service and other interested parties. • Mitigation measures for historic properties may include protective measures, recordation, a monitoring and discovery plan, construction design guidelines, interpretive displays and opportunities for salvage. • Mitigation measures for the four Mason Street Warehouses will include a plan for the temporary relocation during construction and return of these buildings to their original location after construction.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • No temporary impacts have been identified. **PERMANENT IMPACTS** • There would be a direct adverse effect to the Presidio National Historic Landmark District (NHLD) by altering the alignment of some contributing roads, and by the removal of existing cultural landscape features. • The alternative would adversely affect the Presidio NHLD by the removal of four buildings in the Presidio (Buildings 201, 204, 230 and 670). • There would be direct and indirect adverse effects to the cultural landscape of the Presidio NHLD from the removal of existing historic features and addition of new non-historic features. • There would be direct adverse effects to the Golden Gate Bridge property from the removal of Doyle Drive and indirectly from the introduction of new Doyle Drive structures that are dissimilar to the existing roadway structures. **HOOK RAMP OPTION** (specific to option) • Would have an additional adverse effect on the Presidio NHLD resulting from the alteration of Cowles Street, near the Cavalry Stables. **CIRCLE DRIVE OPTION** (specific to option) • Would have a direct adverse affect on the Presidio NHLD resulting from the removal of Building 1151.	• The required agreements and plans will be developed for the cultural resources after consultation with the State Historic Preservation Officer, The Presidio Trust, the National Park Service and other interested parties. • Mitigation measures for historic properties may include protective measures, recordation, a monitoring and discovery plan, construction design guidelines, interpretive displays and opportunities for salvage.



HYDROLOGY, WATER QUALITY, AND STORM WATER

The analysis describes the regulatory setting and existing conditions applicable to hydrology, water quality, and storm water. The location of groundwater and surface water is documented and potential impacts that result from the alternatives are evaluated. Water quality relates to chemical, physical, and biological characteristics of water with respect to its suitability for beneficial use. Roadway projects can affect water quality as increased impervious surfaces can lead to changes in hydrology, and affect surface runoff that drains to streams and natural habitats.

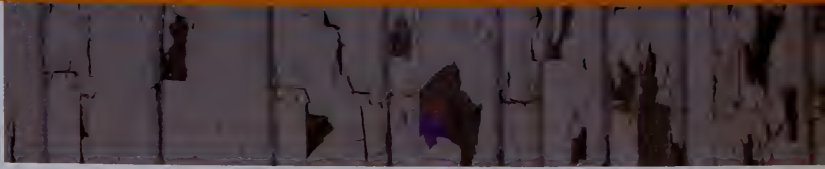
ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • It is possible that contaminants in the groundwater would present environmental harm in the dewatering of excavations during construction. • There is potential for increased stormwater run-off due to construction activities. Runoff would potentially cause erosion and increased sediment deposits into water bodies. **PERMANENT IMPACTS** • The volume of roadway runoff would increase drastically due to the additional impervious roadway. • The alternative would accommodate the flows of the proposed Tennessee Hollow or an expanded Crissy Marsh.	• A Storm water Pollution Prevention Plan will be developed during construction to reduce pollutants in storm water discharges and the potential for erosion and sedimentation. Construction practices consistent with local, regional, and national agencies' requirements will be followed. • Construction dewatering will conform to the Caltrans permit, the Storm water Management Plan or any separate dewatering permit issued by the San Francisco Bay Regional Water Quality Control Board. • In consultation with Caltrans, the National Park Service and the Presidio Trust, Caltrans will develop and implement a feasible long-term storm water treatment option to eliminate or reduce pollutants in runoff from the roadway.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • It is possible that contaminants in the groundwater would present environmental harm in the dewatering of excavations during construction. • There is potential for increased storm water run-off due to construction activities. Runoff would potentially cause erosion and increased sediment deposits into water bodies. **PERMANENT IMPACTS** • Total roadway runoff volume and pollutant loading would be reduced. (beneficial effect) • The low-lying portion of the alignment could be subject to rare flooding events caused by tsunami wave run-up and/or extreme high tides. • There is potential that construction of the tunnel could alter or disrupt groundwater and impact existing plants of the bluffs. In contrast, it is also possible that construction of the tunnel may increase infiltration and raise the groundwater table to deliver more water to the bluffs. • It is possible that infiltrated rainwater may back up against the lower portion of the south Main Post tunnel wall causing problems with drainage and vegetation management. In addition, it is possible that the dirt fill on top of the Main Post tunnel could become excessively dry due to the distance from a groundwater source. • The alternative will accommodate the flows of the proposed Tennessee Hollow or an expanded Crissy Marsh.	• A Storm water Pollution Prevention Plan will be developed during construction to reduce pollutants in storm water discharges and the potential for erosion and sedimentation. Construction practices consistent with local, regional, and national water pollution prevention agencies' requirements will be followed. • Construction dewatering will conform to the Caltrans permit and the Storm water Management Plan or any separate dewatering permit issued by the San Francisco Bay Regional Water Quality Control Board. • In consultation with Caltrans the National Park Service and the Presidio Trust, Caltrans will develop and implement a feasible long-term storm water treatment option to eliminate or reduce pollutants in runoff from the roadway. • A shoring system will be used in the excavation of the tunnel to minimize groundwater intrusion into the below-ground work area. • The design will include flood protection features for the low portions of the roadway such as landscaped berms or barrier structures with crests greater than eleven feet. • In order to maintain groundwater movement in the tunnel area near the bluffs, tunnel construction will include the placement of discrete high-permeability strip drains. • The Main Post tunnel will be constructed with a permeable gravel envelope and/or strip drains so that water will be easily transmitted around the tunnel to minimize the potential for rising groundwater on the south side of the tunnel



GEOLOGY, SOILS, SEISMIC, TOPOGRAPHY

The geology, soils, seismic and topography analysis evaluates ground conditions in the study area to determine if there are potential geologic or seismic risks associated with the alternatives.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • Ground areas exposed during construction would be susceptible to wind and water erosion. • Removal of bedrock may expose construction workers to hazardous concentrations of naturally-occurring asbestos present in serpentine bedrock. **PERMANENT IMPACTS** • Native soils and bedrock (7,700 cubic yards) would be excavated and removed for the construction of the high-viaduct.	• To prevent erosion during construction, a Storm water Pollution Prevention Program will be implemented and controls such as temporary slope protection will be used. • Road structures will be designed in accordance with current seismic design standards and be based on a Magnitude 8 earthquake on the San Andreas Fault. • Special design features will be incorporated into structures that are placed in soils vulnerable to liquefaction. • An Asbestos Dust Mitigation Plan will be prepared. All work involving handling and disposal of asbestos, as well as worker health and safety, will be performed with strict adherence to all applicable Caltrans, federal, state, and local laws and regulations. • An earthwork management plan will be developed in coordination with the Presidio Trust and the National Park Service.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • Ground areas exposed during construction would be susceptible to wind and water erosion. • Removal of Bedrock may expose construction workers to hazardous concentrations of naturally-occurring asbestos present in serpentine bedrock. **PERMANENT IMPACTS** • The existing topography will be modified only in areas of previous disturbance • Native soils and bedrock (over 120,200 cubic yards) would be excavated and removed for the construction of the high-viaduct and tunnels through the eastern bluff.	• To prevent erosion during construction, a Storm water Pollution Prevention Program will be implemented and controls such as temporary slope protection will be used. • Road structures will be designed in accordance with current seismic design standards and be based on a Magnitude 8 earthquake on the San Andreas Fault. • Special design features will be incorporated into structures that would be placed in soils vulnerable to liquefaction. • An Asbestos Dust Mitigation Plan will be prepared. All work involving handling and disposal of asbestos, as well as worker health and safety, will be performed with strict adherence to all applicable Caltrans, federal, state, and local laws and regulations. • An earthwork management plan will be developed in coordination with the Presidio Trust and the National Park Service. • To prevent loss of stability, the slopes used above the tunnels will be geotechnically-stable grades.



HAZARDOUS MATERIALS AND WASTE

The hazardous materials and waste analysis provides research and documentation of existing hazardous materials conditions in the study area. The analysis also assesses the potential for hazardous materials release during construction, operation, and maintenance of the alternatives.

ALTERNATIVE 2 – REPLACE AND WIDEN

IMPACT OVERVIEW

TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)

- Construction workers may be exposed to hazardous concentrations of metals and other contaminants from aerially-deposited lead, viaduct coatings, and historic hazardous materials releases along the project site.
- Construction drilling and excavation may expose construction workers to hazardous concentrations of naturally-occurring asbestos present in serpentine bedrock.
- Construction dewatering could potentially discharge contaminated groundwater to sanitary and/or storm sewers and affect surface water quality.
- Demolition of structures may expose construction workers, park visitors and nearby workers and residents to hazardous concentrations of lead and/or asbestos from building materials.
- Construction could potentially interfere with the investigation and remediation of hazardous material sites at the Presidio.

PERMANENT IMPACTS

- No impacts.

AVOIDANCE, MINIMIZATION AND/OR MITIGATION

- Prior to construction a soil investigation will be preformed to determine additional areas of concern along Doyle Drive. Depending on the results soil management and disposal procedures may be required and additional construction worker health and safety procedures implemented.
- Prior to construction, a Site Management Program/Contingency Plan will be prepared to address known and potential hazardous material issues during construction. The plan will include measures to protect construction workers and the general public from known and accidental releases of hazardous materials during construction.
- Prior to construction, previously prepared geotechnical reports and borings will be reviewed to identify areas of serpentinite bedrock that will be disturbed during construction. Groundwater samples will be taken in areas planned for dewatering.
- Prior to demolition of buildings, a lead-based paint survey and asbestos-containing materials survey will be conducted. Soils near structures that are potentially affected by lead-based paint will be investigated and remediated.
- All construction activities will be coordinated with the Presidio Trust to ensure that project development does not affect on-going investigation and/or remediation of hazardous materials sites.

ALTERNATIVE 5 – PRESIDIO PARKWAY

IMPACT OVERVIEW

TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)

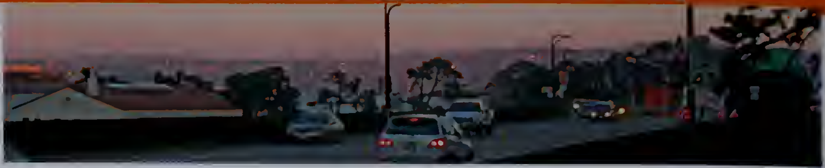
- Construction workers may be exposed to hazardous concentrations of metals and other contaminants from aerially-deposited lead, viaduct coatings, and historic hazardous materials releases along the project site.
- Construction drilling and excavation may expose construction workers to hazardous concentrations of naturally-occurring asbestos present in serpentine bedrock.
- Construction dewatering could potentially discharge contaminated groundwater to sanitary and/or storm sewers and affect surface water quality.
- Demolition of structures may expose construction workers, park visitors and nearby workers and residents to hazardous concentrations of lead and/or asbestos from building materials.
- Construction could potentially interfere with the investigation and remediation of hazardous material sites at the Presidio.

PERMANENT IMPACTS

- No impacts.

AVOIDANCE, MINIMIZATION AND/OR MITIGATION

- Prior to construction a soil investigation will be preformed to determine additional areas of concern along Doyle Drive. Depending on the results soil management and disposal procedures may be required and additional construction worker health and safety procedures implemented.
- Prior to construction, a Site Management Program/Contingency Plan will be prepared to address known and potential hazardous material issues during construction. The plan will include measures to protect construction workers and the general public from known and accidental releases of hazardous materials during construction.
- Prior to construction, geotechnical borings will be reviewed to identify areas of serpentinite bedrock that will be disturbed during construction. Groundwater samples will be taken in areas planned for dewatering.
- Prior to demolition of buildings, a lead-based paint survey and asbestos-containing materials survey will be conducted. Soils near structures that are potentially affected by lead-based paint will be investigated and remediated.
- All construction activities will be coordinated with the Presidio Trust to ensure that project development does not affect on-going investigation and/or remediation of hazardous materials sites.



AIR QUALITY

The air quality analysis considers potential long-term impacts and benefits of the alternatives with regard to regional air quality, and measures compliance with the applicable State Implementation Plan as required by the 1993 Clean Air Act.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • Temporary emission of certain air pollutants and dust could occur during construction. • Construction activities will result in minor and temporary emission of air pollutants from equipment exhaust, construction-related vehicular activity, and construction worker automobile trips. **PERMANENT IMPACTS** • No impacts. The project conforms to the Regional Clean Air Plan and would have no impact on local air quality or cause exceedances of state or federal carbon monoxide (CO) standards.	• During construction, the Bay Area Air Quality Management District's recommended control measures will be implemented including watering active construction areas, covering trucks hauling loose materials, sweeping streets and paving or watering unpaved access roads. • The project will comply with all applicable regulations for reducing air emissions and will be generally consistent with the National Park Service Director's and Executive Order's for promoting cleaner air quality.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • Temporary emission of certain air pollutants and dust could occur during construction. • Construction activities will result in minor and temporary emission of air pollutants from equipment exhaust, construction-related vehicular activity, and construction worker automobile trips. **PERMANENT IMPACTS** • No impacts. The project conforms to the Regional Clean Air Plan and would have no impact on local air quality or cause exceedances of state or federal carbon monoxide (CO) standards.	• During construction, the Bay Area Air Quality Management District's recommended control measures will be implemented including watering active construction areas, covering trucks hauling loose materials, sweeping streets and paving or watering unpaved access roads. • The project will comply with all applicable regulations for reducing air emissions and will be generally consistent with the National Park Service Director's and Executive Order's for promoting cleaner air quality.

NOISE AND VIBRATION

The noise and vibration analysis considers noise and vibration levels associated with construction and future operation of the alternatives.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • Intermittent noise from construction equipment would affect some receptors along Richardson Avenue and Marina Boulevard, Crissy Field Marsh and Crissy Field Center. • The construction equipment will cause temporary vibration impacts in the project area. The highest level of ground vibration will be generated by pile driving, dynamic compaction of road surfaces, blasting, demolition of the viaducts, and truck movements. **PERMANENT IMPACTS** • There will be no perceptible noise impacts to sensitive receptors within the project area. • There will be no perceptible change in vibrations compared to the No-Build conditions.	• To minimize construction noise, the contractor will comply with Caltrans and the National Park Service policies such as monitoring equipment noise levels, muffling sound from equipment tools, and using quieter demolition techniques where feasible. • Construction work hours will be complied with and residents and businesses will be notified of particularly disruptive activities. • Noise abatement measures will be finalized after the selection of a preferred alternative and after input is received from residents and property owners. The types of techniques considered to reduce exterior traffic noise impacts include: traffic management, altering the horizontal and vertical roadway alignment, noise barriers, window retrofit of public buildings, and alternative paving materials. • Pre-condition surveys of historic buildings will be conducted. The appropriate construction vibration limits will be established. Contractors will monitor vibrations during construction around historic buildings. • Typical demolition operations will be modified as necessary to reduce vibrations near historic structures. • If blasting is permitted, it would comply with conservative ground vibration limits at the closest buildings. The Presidio Trust and residents of the affected buildings would be notified of the in advance of the work.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • Intermittent noise from construction equipment would affect some receptors along Richardson Avenue and Marina Boulevard, Crissy Field Marsh and Crissy Field Center. • The construction equipment will cause temporary vibration impacts in the project area. The highest level of ground vibration will be generated by pile driving, dynamic compaction of road surfaces, blasting, demolition of the low-viaduct, and truck movements. **PERMANENT IMPACTS** • Perceptible noise reduction at the National Cemetery and Crissy Center. (beneficial effect). • There will be no perceptible noise impacts to other sensitive receptors within the project area. • Vibration level could increase in the vicinity of Building 106. Predicted vibration levels would be perceptible but not intrusive.	• To minimize construction noise, the contractor will comply with Caltrans and National Park Service policies such as monitoring equipment noise levels, equipping tools with mufflers, and using quieter demolition techniques where feasible. • Construction work hours will be complied with and residents and businesses will be notified of particularly disruptive activities. • Noise abatement measures will be finalized after the selection of a preferred alternative and after input is received from residents and property owners. The types of techniques considered to reduce exterior traffic noise impacts include: traffic management, altering the horizontal and vertical roadway alignment, noise barriers, window retrofit of public buildings, alternative paving materials and absorptive tunnel linings. • Pre-condition surveys of historic buildings will be conducted. The appropriate construction vibration limits will be established. Contractors will monitor vibrations during construction around historic buildings. • Typical demolition operations will be modified as necessary to reduce vibrations near historic structures. • If blasting is permitted, it would comply with conservative ground vibration limits at the closest buildings. The Presidio Trust and residents of the affected buildings would be notified of the in advance of the work.

ENERGY

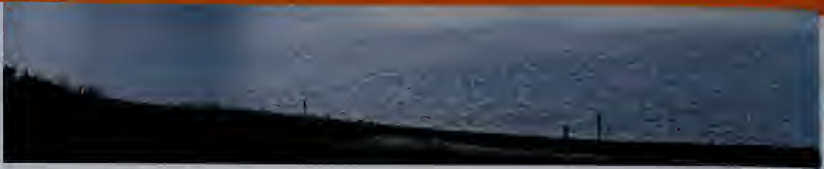
The energy analysis provides information on the potential impact that the alternatives will have on transportation-related energy consumption. Energy is primarily that consumed by vehicles transporting people or goods (propulsion energy) but also includes energy used to operate and maintain facilities. The assessment considers the supply and demand for three types of energy: electricity, natural gas, and other petroleum-based fuels such as gasoline and diesel fuel.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • No impacts. Impacts to energy are always long term because once the resource is expended; it can no longer be recovered. **PERMANENT IMPACTS** • Approximately 814 billion British Thermal Units (BTUs) or 140,000 barrels of oil would be consumed by the vehicle fleet and transit buses per year, a 1% increase in consumption per year compared to the No-Build Alternative.	• Energy consumption could be reduced during construction by locating material production facilities near the project site, using energy efficient construction vehicles and encouraging construction workers to carpool or use public transportation to the construction site.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • No impacts. Impacts to energy are always long term because once the resource is expended; it can no longer be recovered. **PERMANENT IMPACTS** **DIAMOND OPTION** (specific to option) • Approximately 822 billion BTUs or 142,000 barrels of oil would be consumed by the vehicle fleet, transit buses, and tunnel operations per year, a 2% increase in consumption per year compared to the No-Build Alternative. **CIRCLE DRIVE OPTION** (specific to option) • Approximately 821 billion BTUs or 141,000 barrels of oil would be consumed by the vehicle fleet, transit buses, and tunnel operations per year, a 2% increase in consumption per year compared to the No-Build Alternative.	• Energy consumption could be reduced during construction by locating material production facilities near the project site, using energy efficient construction vehicles and encouraging construction workers to carpool or use public transportation to the construction site.

NATURAL COMMUNITIES

The natural communities analysis covers the existing plant communities with a focus on biological communities, not individual plant or animal species. An assessment of the wildlife corridors or areas of habitat used for seasonal and daily migration is provided with information on the potential for sensitive habitat to be divided.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • Trampling of vegetation during construction could lead to erosion, plant community fragmentation, soil and root compaction, and plant mortality at localized areas. Trampling can also cause favorable conditions for invasive non-native plant species resulting in displacement of native plants. • Construction dust could temporarily cover the leaves of plants in a localized area and reduce light and gas exchange. • Approximately 0.06 to 0.11 acre of the northern coastal scrub on sandy soil area would be impacted by construction. • Approximately 0.16 acre of northern coastal scrub with serpentine inclusions would be impacted by construction. **PERMANENT IMPACTS** • Approximately 5.86 to 6.35 acres of non-native introduced forest and ornamental wildlife habitat would be lost. • Approximately 0.40 to 0.43 acre of northern coastal scrub on sandy soil would be disturbed. • Approximately 0.50 acre of northern coastal scrub on sandy soil with serpentine inclusions would be disturbed.	• A Biological Resource Monitoring program will be implemented to avoid and minimize effects on sensitive biological resources. • Biological Monitors will be assigned to complete surveys where needed, monitor construction activities and ensure adherence to the monitoring program. • Important plant communities that are impacted will be revegetated in place to the extent feasible or restored elsewhere within the corridor. • Soil stabilization controls and silt fencing will be implemented during construction to reduce soil runoff during the rainy season. • Dust control procedures and measures will be implemented to control construction dust.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • Trampling of vegetation during construction could lead to erosion, plant community fragmentation, soil and root compaction, and plant mortality at localized areas. Trampling can also cause favorable conditions for invasive non-native plant species resulting in displacement of native plants. • Construction dust could temporarily cover the leaves of plants in a localized area and reduce light and gas exchange. • Approximately 0.02 acre of the northern coastal scrub on sandy soil area would be impacted by construction. • Approximately 0.73 to 0.87 acre of northern coastal scrub with serpentine inclusions would be impacted by construction. **PERMANENT IMPACTS** • Approximately 11.23 to 11.39 acres of non-native introduced forest and ornamental wildlife habitat would be lost. Approximately 0.03 to 0.04 acre of non-native grassland would also be impacted. • Approximately 0.50 acre of northern coastal scrub on sandy soil would be disturbed. • Approximately 0.49 to 0.67 acre of northern coastal scrub on sandy soil with serpentine inclusions would be disturbed. **MERCHANT ROAD SLIP RAMP OPTION** (specific to option) • Would result in approximately 1.15 acres of additional non-native introduced forest and ornamental wildlife habitat to be removed and result in approximately 0.24 acre of additional disturbance to northern coastal scrub on sandy soil with serpentine inclusions.	• A Biological Resource Monitoring program will be implemented to avoid and minimize effects on sensitive biological resources. • Biological Monitors will be assigned to complete surveys where needed, monitor construction activities and ensure adherence to the monitoring program. • Important plant communities that are impacted will be revegetated in place to the extent feasible or restored elsewhere within the corridor. • Soil stabilization controls and silt fencing will be implemented during construction to reduce soil runoff during the rainy season. • Dust control procedures and measures will be implemented to control construction dust.



WETLANDS AND OTHER WATERS OF THE UNITED STATES

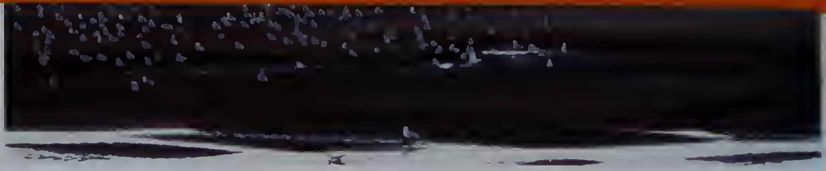
The wetlands analysis describes the regulatory setting and existing conditions applicable to water bodies (wetlands, streams and marshes) in the study area. The location of water bodies and potential effects that result from the alternatives are evaluated.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • Construction would remove or substantially disturb 0.17 acre of Waters of the U.S. and Cowardin wetlands. **PERMANENT IMPACTS** • A total Waters of the U.S. and Cowardin wetlands area of 0.72 acre would be affected.	• Environmentally Sensitive Areas will be designated so that no temporary impacts would occur to riparian scrub and other Waters of the U.S. and Cowardin wetlands located in the construction corridor. • A Biological Resource Monitoring program will be implemented to avoid and minimize effects on sensitive biological resources. • Biological Monitors will be assigned to complete surveys where needed, monitor construction activities and ensure adherence to the monitoring program. • Waters of the U.S. and Cowardin wetlands will be clearly marked on project maps as sensitive areas. To the extent feasible, the project will avoid causing impacts to these waters, however, where permanent impacts are unavoidable, compensation measures will be implemented.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • Construction would remove or substantially disturb 0.31 acre of Waters of the U.S. and Cowardin wetlands. • Tunnel construction could alter or disrupt groundwater flows to the existing Waters of the U.S. and Cowardin wetlands. Increased flows could cause injuries to riparian species through disease (such as root-rot) and soil water deficits could affect the normal physiology and growth of plants. **PERMANENT IMPACTS** • A total Waters of the U.S. and Cowardin wetlands area of 0.72 acre would be affected.	• Environmentally Sensitive Areas will be designated so that no temporary impacts would occur to riparian scrub and other Waters of the U.S. and Cowardin wetlands located in the construction corridor. • A Biological Resource Monitoring program will be implemented to avoid and minimize effects on sensitive biological resources. • Biological Monitors will be assigned to complete surveys where needed, monitor construction activities and ensure adherence to the monitoring program. • Waters of the U.S. and Cowardin wetlands will be clearly marked on project maps as sensitive areas. To the extent feasible, the project will avoid causing impacts to these waters, however, where permanent impacts are unavoidable, compensation measures will be implemented.

PLANT SPECIES

The plant species analysis describes the regulatory setting and the existing individual plant species in the study area. The location of plant species and potential effects that result from the alternatives are evaluated.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • Soil runoff in the wet season could indirectly affect federal special concern plant species and their habitat. • Construction dust could temporarily cover the leaves of plants in a localized area and reduce light and gas exchange. **PERMANENT IMPACTS** • Skunkweed, a federal species of local concern, and the San Francisco gumplant, a federal species of concern, could be removed or disturbed.	• Soil stabilization controls and silt fencing will be implemented during construction to reduce soil runoff during the rainy season. • Sensitive habitat and special-status plant species in the construction corridor will be designated as Environmentally Sensitive Areas. To designate an Environmentally Sensitive Area, plants will be fenced-off with orange fencing during construction. • Dust control procedures and measures will be implemented to control construction dust. • A Biological Resource Monitoring program will be implemented to avoid and minimize effects on sensitive biological resources. • Biological Monitors will be assigned to complete surveys where needed, monitor construction activities and ensure adherence to the monitoring program. • Natural areas in the construction corridor disturbed because of project activities will be revegetated and restored to the appropriate native vegetation type in natural areas, or appropriate ornamental vegetation type in landscaped areas.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • Soil runoff in the wet season could indirectly affect federal special concern plant species and their habitat. • Construction dust could temporarily cover the leaves of plants in a localized area and reduce light and gas exchange. **PERMANENT IMPACTS** • Skunkweed, a federal species of local concern, and the San Francisco gumplant, a federal species of concern, could be removed or disturbed.	•Soil stabilization controls and silt fencing will be implemented during construction to reduce soil runoff during the rainy season. •Sensitive habitat and special-status plant species in the construction corridor will be designated as Environmentally Sensitive Areas. To designate an Environmentally Sensitive Area, plants will be fenced-off with orange fencing during construction. •Dust control procedures and measures will be implemented to control construction dust. •A Biological Resource Monitoring program will be implemented to avoid and minimize effects on sensitive biological resources. •Biological Monitors will be assigned to complete surveys where needed, monitor construction activities and ensure adherence to the monitoring program. •Natural areas in the construction corridor disturbed because of project activities will be revegetated and restored to the appropriate native vegetation type in natural areas, or appropriate ornamental vegetation type in landscaped areas.



ANIMAL SPECIES

The animal species analysis describes the regulatory setting and the existing wildlife in the study area. The location of wildlife and potential effects that result from the alternatives are evaluated.

ALTERNATIVE 2 – REPLACE AND WIDEN

IMPACT OVERVIEW

TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)

- Construction could disturb or directly cause the mortality of common wildlife species, as well as habitat loss and degradation. Construction noise could reduce habitat, causing displacement of some animals.
- Night construction lighting could potentially attract migratory birds.
- Grading and trenching would temporarily disrupt a segment of a primary corridor used by urban wildlife.
- Construction dust could affect plants to become unsuitable for foraging invertebrate species that use plants for perching, metamorphosing nymphs, or egg-laying.
- The habitat for the tree lupine moth would be affected by construction.
- Removing wetland emergent vegetation could result in the mortality of eggs and larvae of the San Francisco forktail damselfly.
- Construction could result in the mortality or reduced productivity of nesting special-status raptors and other avian species.

PERMANENT IMPACTS

- No state or federal threatened or endangered animal species will be affected.
- Removal of vegetation and wetlands/water could affect wildlife habitat.
- Removal of existing Doyle Drive structures could affect bat habitat.

AVOIDANCE, MINIMIZATION AND/OR MITIGATION

- A Biological Resource Monitoring program will be implemented to avoid and minimize effects on sensitive biological resources.
- Biological Monitors will be assigned to complete surveys where needed, monitor construction activities and ensure adherence to the monitoring program.
- Lighting for nighttime construction activities will be directed downward into the immediate area under construction to reduce disturbance.
- A special-status bird avoidance/mitigation plan would be implemented to avoid the loss of active bird nests.
- A special-status bat avoidance/mitigation plan would be implemented to protect breeding bats.
- Best Management Practices would be implemented to minimize impacts on invertebrates.

ALTERNATIVE 5 – PRESIDIO PARKWAY

IMPACT OVERVIEW

TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)

- Construction could disturb or directly cause the mortality of common wildlife species, as well as habitat loss and degradation. Construction noise could reduce habitat, causing displacement of some animals.
- Night construction lighting could potentially attract migratory birds.
- Grading and trenching would temporarily disrupt a segment of a primary corridor used by urban wildlife.
- Construction dust could affect plants to become unsuitable for foraging invertebrate species that use plants for perching, metamorphosing nymphs, or egg-laying.
- The habitat for the tree lupine moth would be affected by construction.
- Removing wetland emergent vegetation could result in the mortality of eggs and larvae of the San Francisco forktail damselfly.
- Construction could result in the mortality or reduced productivity of nesting special-status raptors and other avian species.

PERMANENT IMPACTS

- No state or federal threatened or endangered animal species will be affected.
- Removal of vegetation and wetlands/water could affect wildlife habitat.
- Removal of existing Doyle Drive structures could affect bat habitat.

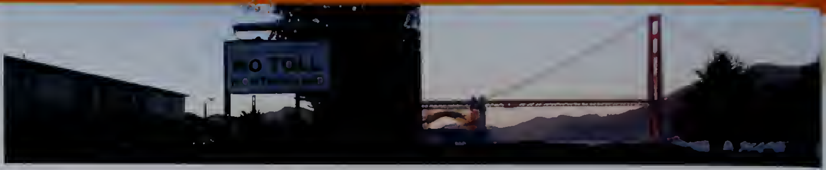
AVOIDANCE, MINIMIZATION AND/OR MITIGATION

- A Biological Resource Monitoring program will be implemented to avoid and minimize effects on sensitive biological resources.
- Biological Monitors will be assigned to complete surveys where needed, monitor construction activities and ensure adherence to the monitoring program.
- Lighting for nighttime construction activities will be directed downward into the immediate area under construction to reduce disturbance.
- A special-status bird avoidance/mitigation plan would be implemented to avoid the loss of active bird nests.
- A special-status bat avoidance/mitigation plan would be implemented to protect breeding bats.
- Best Management Practices would be implemented to minimize impacts on invertebrates.

INVASIVE SPECIES

The invasive species analysis describes the regulatory setting and the existing plant and animal species in the study area that are considered invasive species. The location of invasive species and potential effects that result from the alternatives are evaluated. Invasive species are any species that is not native to the ecosystem whose introduction does or is likely to cause economic or environmental harm or harm to human health.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • Temporary disturbances resulting from construction activities may affect the distribution of invasive plant species in the study area. **PERMANENT IMPACTS** • It is likely that various weedy, invasive plants would establish along portions of Doyle Drive.	• Erosion control and landscaping included in the construction of the project will not use species listed as noxious weeds. • In areas of particular sensitivity, extra precautions will be taken if invasive species are found in construction areas. Precautions could include the inspecting and cleaning of construction equipment and implementing eradication strategies should an invasion occur.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • Temporary disturbances resulting from construction activities may affect the distribution of invasive plant species in the study area. **PERMANENT IMPACTS** • It is likely that various weedy, invasive plants would establish along portions of Doyle Drive.	• Erosion control and landscaping included in the construction of the project will not use species listed as noxious weeds. • In areas of particular sensitivity, extra precautions will be taken if invasive species are found in construction areas. Precautions could include the inspecting and cleaning of construction equipment and implementing eradication strategies should an invasion occur.



CUMULATIVE EFFECTS

The cumulative effects analysis describes the potential environmental impacts resulting from two or more individual effects which, when considered together, are considerable. The evaluation considers past, present, and future projects producing related cumulative impacts to the same resource categories as those impacted by the proposed project. The cumulative effects analysis also considers regional growth projections from the metropolitan planning organizations to address regional impacts such as air quality and land use.

ALTERNATIVE 2 – REPLACE AND WIDEN		ALTERNATIVE 5 – PRESIDIO PARKWAY	
IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION	IMPACT OVERVIEW	AVOIDANCE, MINIMIZATION AND/OR MITIGATION
TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION) • There are no adverse cumulative effects. **PERMANENT IMPACTS** **NO-DETOUR OPTION** (specific to option) • There are no adverse cumulative effects. **DETOUR OPTION** (specific to option) • There are potential adverse cumulative effects to historic resources.	• None required.	**TEMPORARY IMPACTS (SHORT-TERM CONSTRUCTION)** • There are no adverse cumulative effects. **PERMANENT IMPACTS** • There are no adverse cumulative effects.	• None required.

COST AND FUNDING

A balanced funding strategy has been developed for Doyle Drive that relies upon a combination of federal, state, and local funds. The estimated construction cost for each alternative and options is shown below and is presented in 2005 dollars.

Estimated Construction Cost: $552.8 – $701.2 million

The range represents the different project alternative construction costs estimated in millions of dollars.

Alternative Cost Comparison

Estimated Construction Cost in 2005 dollars (in millions of dollars)

ALTERNATIVE 2

Replace and Widen Alternative

- $552.8 (with No Detour Option)
- $585.6 (with Detour Option)

ALTERNATIVE 5:

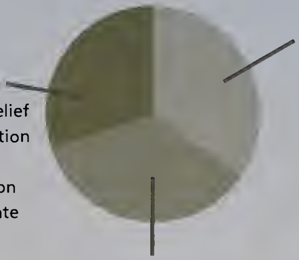
Presidio Parkway Alternative

- $701.2 (with Diamond Option and Loop Ramp Option)
- $690.0 (with Diamond Option and Hook Ramp Option)
- $701.2 (with Circle Option and Loop Ramp Option)
- $689.9 (with Circle Option and Hook Ramp Option)
- Merchant Road Option (add $8.6 to the above costs)

Proposed and Committed Funding Sources and Levels (in millions of dollars)

Funding totals are for project construction and construction support (10%).

TOTAL PROPOSED CONSTRUCTION AND CONSTRUCTION SUPPORT FUNDING: $762.5 MILLION



STATE: $232.2

From Traffic Congestion Relief Program, State Transportation Improvement Program - Interregional Transportation Improvement Program, State Highway Operation and Protection Program.

LOCAL: $263.9

From San Francisco Proposition K local transportation sales tax, State Transportation Improvement Program - Regional Improvement Program, other local funding such as bridge tolls and value pricing.

FEDERAL: $266.4

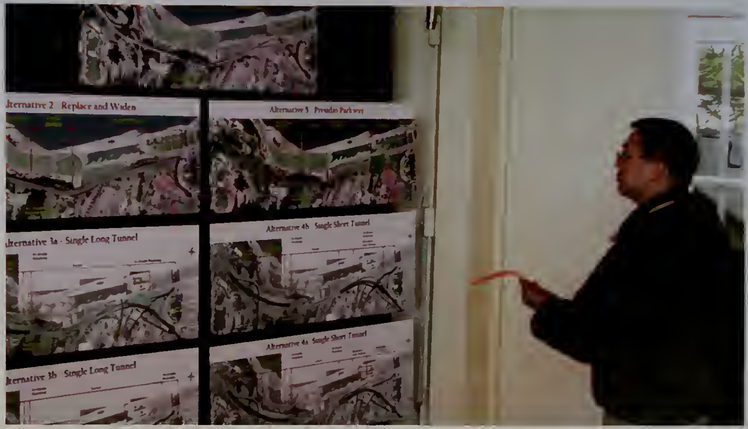
From the High Priority Highways Fund and Public Lands Highways Discretionary Fund.

PUBLIC AND AGENCY COORDINATION

Public involvement is an important part of the environmental study, project design, and construction process. The Authority conducted a comprehensive public involvement and agency coordination program during the preparation of the DEIS/R. The outreach program is vital to ensure that the Doyle Drive Project reflects community needs and agency requirements.

Citizen and agency working groups were established to meet and receive updates on design and environmental issues and provide input (see member lists). Recognizing the important role that all stakeholders play in the project's success, the outreach program has included scoping meetings, public open houses and public hearings, key stakeholder interviews and briefings, ongoing technical and community meetings, project open houses and community workshops, and project information materials such as newsletters, fact sheets, and a Web site www.doyledrive.org.

The Authority will continue to conduct regular coordination meetings to ensure that public dialogue occurs throughout the study process and during construction. Additional outreach will include updates on the project Web site and distribution of study documents for public review.


lternative 2 Replace and Widen
Alternative 5 Presidio Parkway
lternative 1a Single Long Tunnel
Alternative 4b Single Short Tunnel
lternative 1b Single Long Tunnel
Alternative 4a Single Short Tunnel

CITIZENS ADVISORY COMMITTEE SUBCOMMITTEE

(Please see the inside cover for the names of individuals representing the following organizations.)

- Citizens At-Large, San Francisco
- Cow Hollow Association
- Cow Hollow Neighbors in Action
- Fort Point & Presidio Historical Association
- Golden Gate National Recreation Area Advisory Commission
- Marina Civic Improvement & Property Owners Association
- Commuters, Marin County
- Marina Neighborhood Association
- Marina Merchant Association
- Neighborhood Association for Presidio Planning
- Planning Association for the Richmond
- Presidio Residents and Tenants
- San Francisco Bicycle Coalition
- San Francisco County Transportation Authority, Citizens Advisory Committee
- San Francisco Planning and Urban Research Association
- San Francisco Tomorrow
- Sierra Club

AGENCY WORKING GROUP

- Association of Bay Area Governments
- Bay Area Air Quality Management District
- California Department of Transportation, District 4
- Federal Highway Administration
- Golden Gate Bridge, Highway, and Transportation District
- Golden Gate National Recreation Area/National Park Service
- Marin County, Department of Public Works
- Metropolitan Transportation Commission
- The Presidio Trust
- San Francisco Bay Conservation & Development Commission
- San Francisco City and County, Department of Parking and Traffic
- San Francisco City and County, Planning Department
- San Francisco Recreation and Park Department
- San Francisco County Transportation Authority
- U.S. Department of Veterans Affairs

ENVIRONMENTAL DOCUMENT AVAILABILITY

The Draft Environmental Impact Statement/Environmental Impact Report (DEIS/R) for the Doyle Drive Project is now available for public review.

Interested citizens and public agencies have until March 1, 2006 to review the DEIS/R and submit written comments for consideration by the Authority. Two public hearings will be held during the review period to receive public comments.

WHERE CAN I GET A COPY OF THE DEIS/R?

- The DEIS/R is available for review at the following libraries:

Caltrans Transportation Library
111 Grand Avenue, Room 12-639
Oakland, CA 94612

San Francisco Public Library
Government Information Center
100 Larkin Street
San Francisco, CA, 94102

Marin County Public Library
3501 Civic Center Drive, Suite 427
San Rafael, CA 94903

- On the project Web site at: www.doyledrive.org

Copies of the DEIS/R are available in two different formats:

1) CD ROM for computer viewing
2) Hard copy

To obtain a copy of the DEIS/R, contact the Authority at (415) 522-4800.

HOW TO SUBMIT COMMENTS

Comments on the DEIS/R may be made in writing to the address below or by speaking at the public hearing. Public comments must address the contents of the DEIS/R and not the contents of this guide.

HOW DO I SUBMIT COMMENTS ON THE DEIS/R?

- **Regular Mail:**

Leroy L. Saage, PE
Doyle Drive Project Manager
c/o San Francisco County
Transportation Authority
100 Van Ness Avenue, 26th Floor
San Francisco, CA 94102
(415) 522-4812

- **E-mail:**
doyledrivecomments@sfcta.org

- **Web site:**
www.doyledrive.org

All comments must be received no later than 5:00 p.m. on March 1, 2006.

Attend one of two public hearings:

The public hearings will be held on January 18, 2006 and February 15, 2006. Please visit www.doyledrive.org for details on the public hearings location and times.

NEXT STEPS

The DEIS/R is being circulated for public comments until March 1, 2006. Two public hearings will be held to take comments from interested parties and the public regarding the alternatives, impacts, and proposed mitigation measures.

Comments received in writing prior to the close of the public comment period, and any comments entered into the public record at the public hearing, will be responded to in writing in the Final EIS/R (FEIS/R).

The Authority and FHWA will consider the public comments in concert with the information presented in the DEIS/R. Following the comment period, a preferred alternative will be identified and a FEIS/R will be prepared. The preferred alternative will be selected based on collaboration with and input from FHWA, the Authority, Caltrans and the cooperating and responsible agencies, findings from the DEIS/R and input received during the comment period.

If the project were given environmental approval and funding were appropriated, the final design and construction of all or part of the project would proceed. Coordination will continue with local agencies, other jurisdictional entities, and the public to develop the project throughout the FEIS/R, final design, and construction phases of the project.

PROJECT SCHEDULE

ENVIRONMENTAL PROCESS

Winter 2006	Early Spring 2006	Spring 2006	Summer 2006	Late Fall 2006	Fall/Winter 2006
Public Comment Period and Public Hearings on DEIS/R	Develop Preferred Alternative Recommendation	Authority Board & FHWA Identify Preferred Alternative	Prepare FEIS/R	• Authority Board Certifies Final EIR • FHWA Approves Final EIS • FEIS/R Released	• Authority Issues Notice of Determination • FHWA Issues Record of Decision

DETAILED DESIGN AND CONSTRUCTION

2007	2009	2012
Begin Detailed Design	Begin Construction	Complete Construction

SAN FRANCISCO COUNTY TRANSPORTATION AUTHORITY
100 VAN NESS AVENUE 25TH FLOOR, SAN FRANCISCO, CALIFORNIA 94102
415.522.4800 | WWW.DOYLEDRIVE.ORG